

UNDER DEVELOPMENT

Building blocks

Want to build your own high-spec PC from scratch for £300 in under an hour? As David Robinson discovered, it's a piece of cake – until you try to install Windows

Right, where were we? Oh yes – building a new PC (see *Under Development*, *Shopper* April 2007). But before we start on that, let's get the answer to the binary digital fart problem in *Under Development*, March 2007 out of the way. Loads of people thought it was a simple Hex(adecimal) translation, but after further consideration I'm more inclined to go with the one and only answer derived from the Tessella table. This came from reader David Williamson and was not at all obvious. Check out the blog dates around the end of January on www.drsaxon.co.uk for a full explanation.

SPECS MANIAC

Now, down to building the new PC. I wanted something with loads of power for as little money as possible. To save faffing about, I decided to get all the bits from the same source – in this case, the trade supplier CMS in Liverpool (www.cms-computers.co.uk). I wanted a dual-core processor and opted for an AMD Athlon 64 3800+ coupled with the ECS GeForce 6100SM-M motherboard, which won a Budget Buy award in *Labs*, *Shopper* January 2007.

THE PARTS LIST

AMD Athlon 64 3800+	£76
ECS motherboard	£33
1GB DDR2 RAM	£55
AOpen H450E case	£32
Pioneer dual-layer DVD-RW	£19
Speeze processor cooler	£5
Wireless keyboard and mouse	£13
320GB WD Caviar SATA hard disk	£54
Carriage	£13
Total (excluding VAT)	£300

This was rather more than Chris Finnamore had spent building a computer in *PC Builder*, *Shopper* March 2007, but it gave me a far higher-spec computer. As I could get back the VAT and get the operating system using our Microsoft Direct Access Developer sub, that was the total cost.



The case was described as being 'Prescott-ready' – a term new to me. Assessing the odds of an overweight MP coming round and sitting on the case as remote, I decided it probably wasn't some reference to its load-bearing capacity so I consulted Patrick. He informed me it had something to do with the power supply and ventilation arrangements, which probably explains the funny plastic chimney thing inside the case.

The motherboard has a lot of features and I'm very pleased with it. However, potential buyers should be aware that it comes in a couple of versions with options. The 'vanilla' version has circuitry but no connectors for infrared or FireWire. According to the manual the other version has the connectors; I got the one without.

SCREWING AROUND

Screwing the whole lot together was a doddle and took about 40 minutes. I used to be able to assemble one much faster but, not having done so for years, I decided to take my time and RTFM. My all-time record was eight minutes back when the *Computer Shopper* Show was the biggest live computer event around. I used to have a live theatre spot where, four times a day, I had to explain how to build a PC from bits as a way of illustrating why the specs of the various components mattered. Despite knocking them about, the

PCs always worked. Perhaps if my current business flounders, I could get a job on Dell's production line.

All I had to do now was install an operating system. But which one? Should I play safe with XP Professional Edition or set myself up for six months of hair-pulling with the Vista Beta? I decided to make the most of the 64-bit hardware with XP 64. I just slapped in the CD and let it do its thing. Which it did, for a while. I was asked a few questions about file system types and partition size, and it formatted the hard disk. Then it stopped and said the drive was bad. How could the bloody drive be bad when it just formatted OK? What's more, when I was dumped into a command-style interface after the error, I could read the disk OK with CD and DIR commands. I tried again from scratch with the same result. I tried again with XP Professional Edition and the same happened with that, too, so it wasn't an XP 64 quirk.

DRIVES ME CRAZY

Keef stuck his oar in and we decided the disk wasn't bad as the message said, but needed the SATA drivers loading into the OS. Here lies a big problem. The drivers are on a CD. And where does the install routine insist on looking for the drivers? On the floppy drive. Which we don't have in the computer – I mean, who builds PCs with a floppy drive these days? We tried to bodge it by amending the file that says

where to look for the drivers so that we could read them from the CD, but that didn't work either because:

- 1 There's no text editor available
- 2 When you load one from a CD it won't run
- 3 The file is read-only and the command interface won't let you change that.

One answer is to construct your own install CD, but that's an awful lot of faffing, so we bowed to the inevitable and borrowed a floppy drive from another PC. We then copied the SATA hard disk drivers from the CD to the floppy disk, which you have to do on yet another PC. If you're Dell or Mesh, I guess it's no big deal to customise your own install CD or to do one installation then ghost it to other identical hard disks. If you're a lone user and you don't have another PC on which to do the copying (and/or borrow a floppy drive from), you're properly stuck.

Does Microsoft make it this awkward intentionally, or is it just congenitally obtuse?

FLYING MACHINE

But after all that, the new PC now goes just fine. In fact, it flies. Mrs R's present of Cakewalk Sonar installed easily and runs really well, too. The processor-hungry soft synth plug-ins sound excellent and I'm chuffed to bits. My old copy of Flight Simulator gets very confused about its startup settings, however, and I have to sort them out every time I load it. Saving the settings doesn't seem to work, and it always starts up with a strange view of the cockpit ceiling. Perhaps it's a subtle difference in the Windows 98 and x64 Registry formats. I'll probably have to fork out for a new copy.

What about the SuperBike simulation that started all this off? Well, that loaded OK and started the interminable introduction sequence, and then... oh, sorry, I'm out of space for this issue! **CS**

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